Obsessive Compulsive Disorder among Children and Adolescents in Bangladesh

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ABSTRACT

Background: In children and adolescents, prevalence of Obsessive Compulsive Disorder (OCD) is 0.5-2%. In Bangladesh, the prevalence of OCD among children is 2% that is higher than in previous studies. Though presentation of obsession and compulsion is heterogeneous, two commonest themes are obsessional concern of having offended God and compulsion related to cleanliness found among Bangladeshi children. Aims: To find out the type, frequency and severity of symptoms of OCD and comorbidity among children and adolescents. Methods: A consecutive series of 60 OCD cases from a child mental health service with age range of 5-16 years are recruited. The assessment of OCD and comorbid psychiatric disorder is carried out using standardized Bangla version of Development and Well-Being Assessment. For assessment of symptom pattern and severity of OCD, Children's Yale-Brown Obsessive Compulsive Scale is administered. Results: Of the obsession, contamination is the highest followed by doubt, religious, aggressive and somatic. Of the compulsion, washing/cleaning is the highest followed by checking, repeating, ordering/arranging, rituals involving other persons, games/suppositious behavior, hoarding/saving and counting. More than half of the subjects have severe OCD. Comorbidity is present in 58% subjects. Specific phobia, social phobia, major depressive disorder and tic disorder are more prevalent. Mean obsession score is significantly higher in the adolescents than the children. Conclusion: OCD causes severe distress in children and adolescents further complicated with comorbid psychiatric disorders that needs to be addressed. It confirms the differences of symptom pattern of OCD among Bangladeshi children and adolescents with comparatively more religious concerns.

INTRODUCTION

Obsessive Compulsive Disorder (OCD) is a common mental health problem. OCD has a variety of presentation and has a chronic waxing and waning course. The obsessions or compulsions of this disorder are time consuming and interfere significantly with the persons normal routine, occupational functioning, usual social activities or relationship1. The life time prevalence of OCD in the general population is estimated at 2 to 3 percent1. OCD is also common among children and adolescent population. Jenike (1989) refers to OCD as a "hidden epidemic" primarily because the disorder is frequently unrecognized and is therefore underdiagnosed2. Epidemiological studies suggest a prevalence of roughly 0.5% to 2% in adolescents. The prevalence is lower in pre-pubertal children, but typical OCD can occur in children aged seven or even younger. Males and females are equally commonly affected from adolescence onwards, but males predominate in pre-pubertal OCD3. . In Bangladesh, prevalence of OCD in children are similar to other countries. A community based epidemiological survey reported that prevalence of OCD among children is 2%4.The presentation of obsessions and compulsions is heterogeneous in adults as well as in children and adolescents. Most of these differences are related to the developmental limitations of younger children compared to adults etc1.Co-morbidity is usually high among children and adolescent patients suffering from OCD. In the British nationwide survey of child mental health reported that, co-morbid diagnoses are present in 76% cases. The types of co-morbid diagnoses are anxiety disorders (52%), depression (20%), conduct disorder (44%), eating disorder (4%). There are no children with co-morbid hyperactivity or tic disorders5. Also in line with this study another study shows that, about two-thirds of young people with OCD have at least one other psychiatric diagnosis6.

It was evident that the pattern of presentation of obsessive compulsive disorder between children and adolescent might be different due to developmental limitation of younger children. It was researcher's clinical observation that, pattern of presentation of obsessions and compulsions among children and adolescents may be different in Bangladesh due to different cultural and religious background. So this study tried to focus some light on these aspects. This study was aimed to find out the type and frequency of the symptoms of OCD among children and adolescent population, to compare the symptom contents, severity, and associated features of OCD between children and adolescents suffering from OCD, to delineate the co-morbidity of OCD in children and adolescent, and to identify the possible association of socio-demographic and cultural variables with OCD in children and adolescent.

METHODS

This is cross sectional descriptive and analytical study carried out in the Child and Adolescent Outpatient Services of the Department of Psychiatry, Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, the lone Postgraduate Medical University in Bangladesh. The study was carried out between January 2009 to December 2009. A total of 60 consecutive patients with OCD between 5-18 years of age were evaluated. Patents Register was taken as sampling frame. The cases were divided into two groups-children up to 11 years and adolescents from 12-18 years. For assessment of OCD and co-morbidity, structured instrument for assessment of child psychopathology, standardized and validated Bangla version of Development and Wellbeing Assessment (DAWABA) was administered4.. Parent DAWBA was used for all the cases. In addition, Self DAWABA was used for the adolescent cases. DAWABA generated ICD-10 DCR diagnoses were assigned for the cases. Only Axis one diagnosis was considered. For assessment of symptom pattern of and severity of OCD, Children's Yale-Brown Obsessive–Compulsive Scale (CY-BOCS) was used. Sociodemeographic characteristics were assessed by a questionnaire designed for the study.

RESULTS

Out of 60 OCD patients, 21 were children and 39 were adolescents. Their age ranged from 8-18 yaers with the mean of 13.9±3.44 years. Among the patients, 43(71.7%) were boys and 17(28.3%) were girls with boy and girl ratio of 2.5:1.Majority of cases came from urban areas (81.7%) with middle income group (57.7%). Ninety percent cases were Muslims. All the cases were students; half of the patients were in secondary level followed by primary level (28.3%). Forty-five percent cases had first degree family history of psychiatric disorder. Among them, highest percentage had OCD (63%) followed by mood disorder (15%) and anxiety disorders (15%).Analysis revealed that highest percentage of patients had contamination obsession (66.7%) followed by miscellaneous obsessions(56.7%) that mainly included pathological doubt, religious obsession (30%), aggressive obsession and somatic obsessions (18%). Proportion of aggressive obsessions (25.6%), religious obsessions (36%), miscellaneous obsessions (64%), hoarding/saving obsessions(10%), somatic obsessions(18%) were found to be higher among the adolescents group whereas contamination obsessions (71%), sexual obsessions(14%), magical thoughts 95%) were found to be high among the children group.

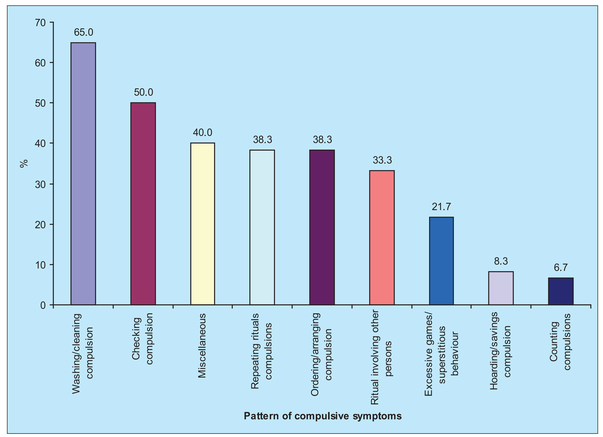

Figure-1: Pattern of obsessional symptoms

Symptom pattern(compulsions) of OCD indicated that highest percentage of patients had washing/cleaning compulsion(65%) followed by checking compulsion(50%), miscellaneous(40%), repeating compulsion(38%), ordering/arranging compulsion (38%), rituals involving other persons (33%), excessive games/superstitious behavior(22%), hoarding and/savings compulsion (8%) and counting compulsion (7%). Composite symptoms score of OCD revealed that mean weighted obsessive score was 1.86±0.6 for children and 2.33±1.3 for adolescents. Similarly, the mean weighted compulsive score was 2.86±1.8 for the children 3.10±1.8 for the adolescents. No statistically significant difference of mean weighted score was found between children and adolescents (p>0.05) though the mean score was higher among the adolescents than that of children.

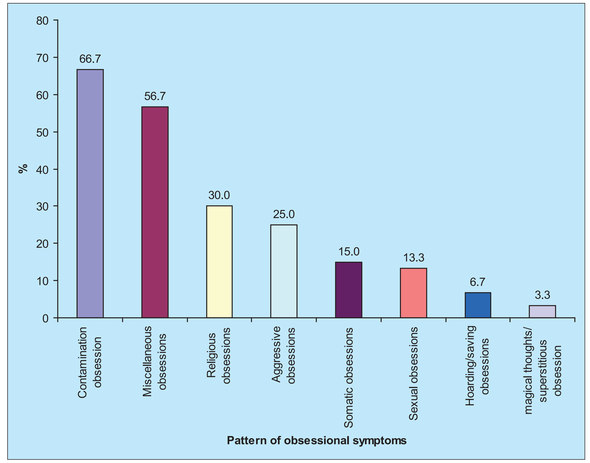

Figure-2: Pattern of compulsive symptoms

Axis one co-morbidity was present among 51.7% of cases with OCD. Highest percentage had specific phobia (10%) followed by major depressive disorder (10%), social phobia (10%), tic disorder (8.3%), oppositional defiant disorder (6.7%), hyperkinetic disorder (9.0%), generalized anxiety disorder (3.3%), conduct disorder (3.3%) and autism spectrum disorder (3.3%).

Table-1: Pattern of co-morbidity among the patients

Pattern of co-morbidity	Age in years				Total (n=60)		p value
	<12 (n=21)		≥12(n=39)				
	No.	%	No.	%	No.	%	
Generalized anxiety disorder	0	.0	2	5.1	2	3.3	
Specific phobia	6	28.6	0	.0	6	10.0	
Tic disorder	5	23.8	0	.0	5	8.3	
Conduct disorder	0	.0	2	5.1	2	3.3	
Oppositional defiant disorder	2	9.5	2	5.1	4	6.7	
Hyperkinetic disorder	4	23.8	0	.0	4	9.0	
Major depressive disorder	0	.0	6	15.4	6	10.0	
Social phobia	1	4.8	5	12.8	6	10.0	
Autism spectrum disorder	1	4.8	1	2.6	2	3.3	
Co-morbidity							
OCD only	8	38.1	21	53.8	29	48.3	0.244
Co-morbidity	13	61.9	18	46.2	31	51.7	

Mean score of time spent on obsession, obsession free interval, interference from obsessions were higher among the adolescents than that of children and the mean difference was statistically significant (p<0.006) indicating that the adolescents were more obsessive than the children. Compulsion score for the children was 13.19±2.8 and that for the adolescent was 14.54±3.4. However, no statistically significant mean compulsion score difference was found between children and adolescents(p>0.05).

Table-2: Characteristics feature according to Children's Yale-Brown Obsessive Scale

Characteristics	Age in years				Total (n=60)		p value
	<12 (n=21)		≥12(n=39)				
	No.	%	No.	%	No.	%	
Time spent on obsession							
Mild	2	9.5	2	5.1	4	6.7	
Moderate	9	42.9	10	25.6	19	31.7	
Severe	10	47.6	15	38.5	25	41.7	
Extreme	0	.0	12	30.8	12	20.0	
Mean ± SD score	2.38±0.7		2.95±0.9		2.75±0.9		0.013
Obsession free interval							
Long	1	4.8	3	7.7	4	6.7	
Moderately long	16	76.2	14	35.9	30	50.0	
Short	3	14.3	17	43.6	20	33.3	
Extremely short	1	4.8	5	12.8	6	10.0	
Mean ± SD score	2.19±0.6		2.62±0.8		2.47±0.8		0.040
Interference from obsessions							
Long	1	4.8	3	7.7	4	6.7	
Moderately long	10	47.6	7	17.9	17	28.3	
Short	10	47.6	10	25.6	20	33.3	
Extremely short	0	.0	19	48.7	19	31.7	
Mean ± SD score	2.43±0.6		3.15±1.0		2.90±0.9		0.003
Distress of obsessions							
Long	1	4.8	2	5.1	3	5.0	
Moderately long	4	19.0	3	7.7	7	11.7	
Short	12	57.1	12	30.8	24	40.0	
Extremely short	4	19.0	22	56.4	26	43.3	
Mean ± SD score	2.90±0.8		3.38±0.8		3.22±0.8		0.035
Resistance							
Much resistance	1	4.8	1	2.6	2	3.3	
Some resistance	1	4.8	3	7.7	4	6.7	
Often yields	17	81.0	23	59.0	40	66.7	
Completely yields	2	9.5	12	30.8	14	23.3	
Mean ± SD score	2.95±0.6		3.18±0.7		3.10±0.7		0.204
Control over obsessions							
Much control	1	4.8	0	.0	1	1.7	
Moderate control	1	4.8	3	7.7	4	6.7	
Little control	17	81.0	23	59.0	40	66.7	
No control	2	9.5	13	33.3	15	25.0	
Mean ± SD score	2.95±0.6		3.26±0.6		3.15±0.6		0.063
Total obsession score	13.62±2.8		15.92±3.1		15.12±3.2		0.006

p value reached from unpaired student's t test

Severity of OCD according to CY-BOCS revealed more than half of the patients had severe OCD (53.3%) followed by 36.7% had extreme OCD, 6.7% had moderate OCD and only 3.3% had mild OCD. The proportion of extreme OCD was found to be high among the adolescent (4.8.7%) whereas severe OCD was higher among the children (71.4%). The mean score for OCD was 26.81±5.2 for the children and 30.46±5.9 for the adolescents and mean difference was statistically significant (p<0.05).

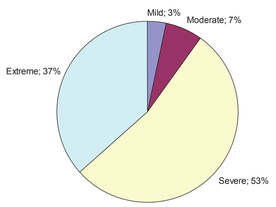

Figure-3:Percent distribution of severity of OCD

CONCLUSION

Findings of the study will help our health professionals to identify the symptom pattern of OCD, its severity and co-morbid conditions among child and adolescent patients. It will increase awareness of family members and general people. This will lead them early treatment seeking. Findings of the study will help creating an information baseline to carry out further study in this field in future.

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